

*REMARKS**Discussion of Claim Amendments*

Claims 1 and 58 have been amended to include a proviso that when X and Y are O, R₁ is C₁₈H₃₇, and only one of R₂ and R₆ is OCH₃, then R₃ and R₅ are not simultaneously OH. Claims 31 and 34 have been rewritten in independent form including the limitation of claim 28 upon which the claims originally depended. Claims 56 and 67 have been amended to recite specific cancers recited in claims 57 and 69, which are now canceled. Claim 58 also has been amended to delete CHCOOH and C(COOH)₂ from the description of group A; further, in view of the amendment, the proviso relating to A has been removed as it is now unnecessary. New claims 70-71 have been added and are directed to embodiments of the invention. No new matter has been added by way of these amendments.

The Office Action

The Office Action sets forth the following grounds for rejection: (1) Claims 1, 3-17, 28, 37, 38, 53-59, and 64-69 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Teraji et al. (USP 4,585,762); (2) claims 56, 58 and 67 are rejected under 35 U.S.C. § 112, first paragraph, for an alleged non-enablement; and (3) claims 31 and 34 are objected to under 37 C.F.R. § 1.75(c).

Claims 18-27, 29-36, and 60-63 are objected to as being dependent upon a rejected base claim. The Office indicates that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Discussion of Rejections

1. Anticipation Rejection

Claims 1, 3-17, 28, 37, 38, 53-59, and 64-69 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Teraji et al. The Office states that compound D in column 6 anticipates the compound of formula I. Applicants have amended independent claims 1 and 58 to include a proviso that when X and Y are O, R₁ is C₁₈H₃₇, and only one of R₂ and R₆ is OCH₃, then R₃ and R₅ are not simultaneously OH. The remaining claims are directly or

ultimately dependent upon either amended claim 1 or 58. In view of the foregoing, Teraji et al. fails to anticipate the presently claimed invention and the anticipation rejection should be removed. New claims 70-71 also should not be rejected on this basis.

2. Section 112, First Paragraph, Rejections

Claim 58 has been rejected under 35 U.S.C. § 112, first paragraph, for an alleged non-enablement. Applicant has amended claim 58 to delete the selection of compounds wherein $A = \text{CHCOOH}$ and $\text{C}(\text{COOH})_2$, which should render the Office's concern in regards to A. The Office also contends that the claim is not enabled for compounds wherein R_2 - R_6 are isosteres of OH. The Office contends that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. The Office contends that there are no examples in the application wherein the OH functional group is replaced by isosteres such as $-\text{NH}_2$ or $-\text{SH}$. The Office states that the amount of direction provided by the application to make these compounds is inadequate. Applicants respectfully disagree.

It is not required, under 35 USC § 112, first paragraph, that the specification provides every detail needed to make the claimed compounds. See, e.g., *In re Gay*, 309 F.2d 769, 135 USPQ 311 (CCPA 1962) ("... not every last detail be described [in a patent specification], else patent specifications would run into product specifications, which they were never intended to be."); *In re Buchner*, 929 F.2d 660, 18 USPQ2d 1331 (Fed. Cir. 1991) ("... a specification need not describe - and best omits - that which is well known in the art.").

The specification is addressed to the skilled artisan. The skilled artisan would know how to convert a hydroxyl ($-\text{OH}$) group on the cyclohexyl ring into an amine ($-\text{NH}_2$) or a thiol ($-\text{SH}$) group. For example, one can start with a secondary alcohol group on the cyclohexane ring and oxidize it to a ketone. The ketone function can be reacted with ammonia or an amine ($\text{NH}_2\text{R}/\text{NHRR}'$) to produce an imine product. The imine product can then be reduced to get the desired amino product which is primary, secondary, or tertiary ($-\text{NH}_2/-\text{NHR}/-\text{NRR}'$). As a further example, one can start with a secondary alcohol group on the cyclohexyl ring, and brominate or chlorinate (e.g., by the use of PBr_3 or SOCl_2) to prepare an alkyl halide. The alkyl halide can be reacted with an excess of sodium hydrogen sulfide (NaSH) to prepare the mercapto product. In view of the foregoing, applicants respectfully

submit that the specification adequately enables those of skill in the art to prepare isosteres of OH for R₂-R₆. Accordingly, the non-enablement rejection should be withdrawn.

Claims 56 and 67 also have been rejected under 35 U.S.C. § 112, first paragraph, for an alleged non-enablement. Applicants have amended these claims to recite specific cancers which the Examiner indicated are enabled. Accordingly, the rejection should be removed.

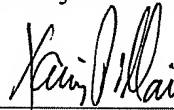
3. Claim Objection

Claims 31 and 34 are objected to under 37 C.F.R. § 1.75(c) for an alleged improper dependency. Applicants have rewritten the claims as independent claims, thereby rendering the objection moot. Accordingly, the claim objection should be removed.

Conclusion

A favorable decision is solicited. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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